

MARINER WAY PARKING LOT EXPANSION

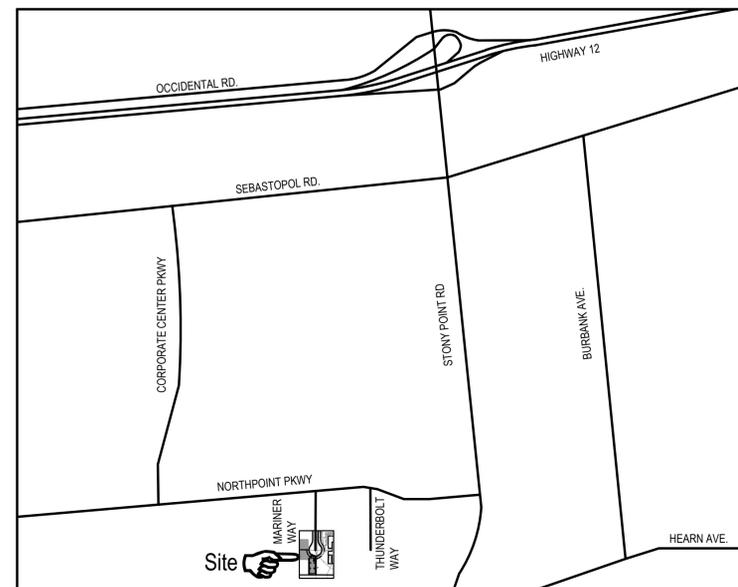
ON-SITE IMPROVEMENT PLANS

1402 MARINER WAY
SANTA ROSA, CA 95407
APN: 035-530-050

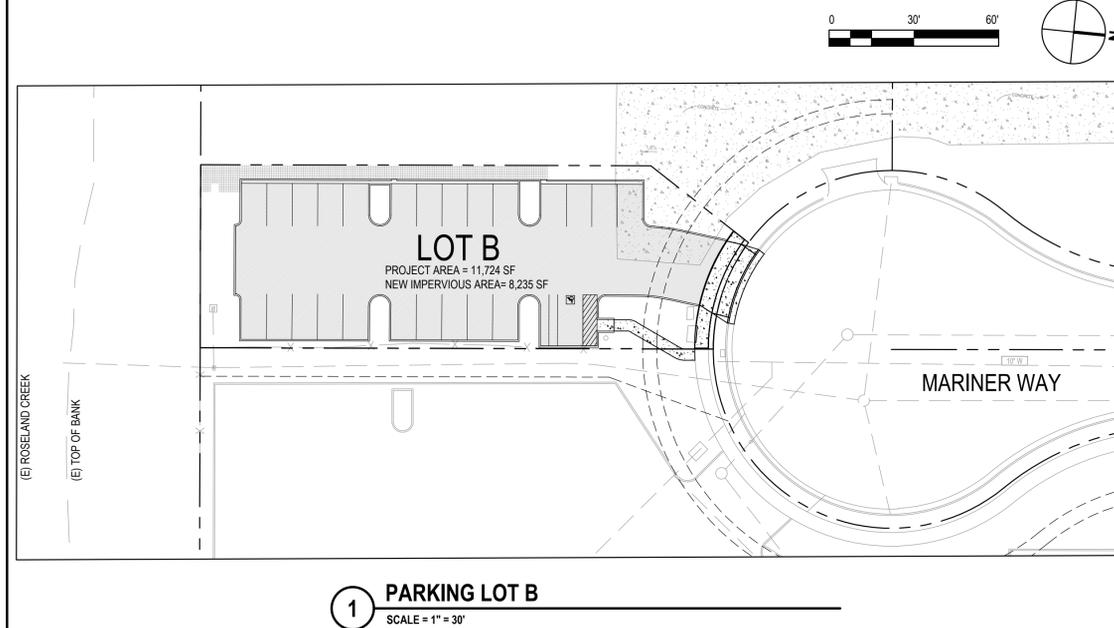


GHD Inc.
943 Reserve Dr #100
Roseville, CA 95678
T 1 916782-8688 W www.ghd.com

VICINITY MAP - NTS



PROJECT LAYOUT



SHEET INDEX

- | | | |
|----|-------|--|
| 1. | G-001 | COVER SHEET |
| 2. | C-100 | SITE LOCATION MAP |
| 3. | C-101 | SITE PLAN |
| 4. | C-102 | GRADING PLAN |
| 5. | C-103 | TYPICAL SECTIONS |
| 6. | L-100 | LANDSCAPING PLAN |
| 7. | E-001 | ELECTRICAL LEGEND, NOTES & ABBREVIATIONS |
| 8. | E-101 | SITE PLAN LOT B |
| 9. | E-701 | LOT-B PHOTOMETRICS |

City of Santa Rosa
September 9/2020
Planning & Economic
Development Department

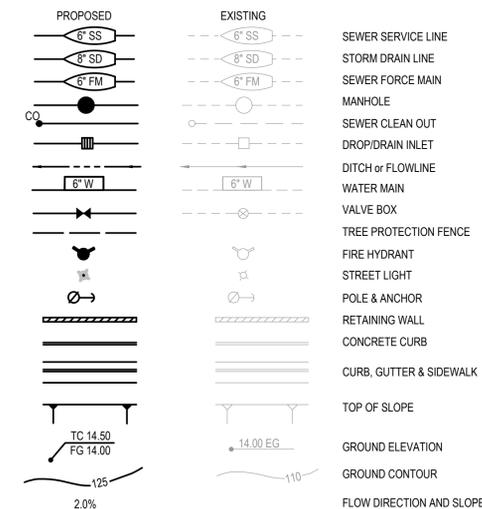
Reuse of Documents
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2020 GHD



Client
VIAVI Solutions Inc.
6001 AMERICA CENTER DRIVE, 6TH FLOOR
SAN JOSE, CA 95002

Project
MARINER WAY,
PARKING LOT EXPANSION

SYMBOLS



ABBREVIATIONS

#	NUMBER	DESCRIPTION	SYMBOL	DESCRIPTION	
AB	AGGREGATE BASE OR ACRE	FL	FIRE HYDRANT	SD	STORM DRAIN
AC	ASPHALTIC CONCRETE	FL	FLOWLINE	SD#	STANDARD DRAWING NUMBER
AHJ	AUTHORITY HAVING JURISDICTION	FP	FINISHED PAVEMENT	SDMH	STORM DRAIN MANHOLE
APN	ASSESSORS PARCEL NUMBER	FS	FINISHED SURFACE	SP#	STANDARD PLAN NUMBER
ARV	AIR RELEASE VALVE	(F)	FUTURE	SS	SANITARY SEWER
BC	BEGIN CURVE	G	GAS	SSCO	SANITARY SEWER CLEAN OUT
BFP	BACKFLOW PREVENTER	GB	GRADE BREAK	SSMH	SANITARY SEWER MANHOLE
BO	BLOW OFF	GV	GATE VALVE	STA	STATION
BOW	BOTTOM OF WALL	INTX	INTERSECTION	SUBD.	SUBDIVISION
BVC	BEGIN VERTICAL CURVE	INV	INVERT	SWPPP	STORM WATER POLLUTION PREVENTION PLAN
BW	BACK OF WALK	JT	JOIN TRENCH	T	TELEPHONE
C/G	CURB AND GUTTER	LF	LINEAR FEET	TBW	TOP BACK OF WALK
CH	CHORD	LT	LEFT	TC	TOP OF CURB
CHL	CHORD LENGTH	MAX	MAXIMUM	TOW	TOP OF WALL
CL	CENTERLINE	MH	MANHOLE	TW	TOP OF WALK
CMP	CORRUGATED METAL PIPE	MIN	MINIMUM	(TYP)	TYPICAL
CMU	CONCRETE MASONRY UNIT	NTS	NOT TO SCALE	V	VAULT
CO	CLEAN OUT	OC	ON CENTER	V	VARIABLES
CGSW	CURB, GUTTER & SIDEWALK	OH	OVERHEAD	VC	VERTICAL CURVE
CONC	CONCRETE	PCC	PORTLAND CEMENT CONCRETE	W	WATER
CR	CURB RETURN	PIV	POST INDICATOR VALVE	WM	WATER METER
DCV	DETECTOR CHECK VALVE	PL	PROPERTY LINE	WS	WATER SERVICE
DI	DRAIN INLET	POC	POINT OF CONNECTION	WV	WATER VALVE
DI	DRIVEWAY	PP	POWER POLE		
DWY	ELECTRICAL	PRC	POINT OF REVERSE CURVE		
E	END CURVE	PRVC	POINT OF REVERSE VERTICAL CURVE		
ELV	ELEVATION	PSE	PUBLIC SERVICE EASEMENT		
EP	EDGE OF PAVEMENT	PUE	PUBLIC UTILITIES EASEMENT		
EVC	END VERTICAL CURVE	PVC	POLYVINYL CHLORIDE		
(E)	EXISTING	PVI	POINT VERTICAL INTERSECTION		
FD	FIRE DEPARTMENT	(P)	PROPOSED		
FDC	FIRE DEPARTMENT CONNECTION	R	RADIUS		
FF	FINISHED FLOOR	ROW	RIGHT OF WAY		
FFE	FINISHED FLOOR ELEVATION	RC	REVERSE CURVE		
FG	FINISHED GRADE	RT	RIGHT		
		S#	SLOPE PERCENTAGE		

DESIGN CONCEPT NARRATIVE

- THE PROJECT INCLUDES THE FOLLOWING:
- DEMOLITION OF SIDEWALK, CURB & GUTTER FOR PROPOSED DRIVEWAY.
 - DEMOLITION OF THE EXISTING CONCRETE AIRSTRIP WITHIN PROJECT LIMITS.
 - PROPOSED IMPROVEMENTS INCLUDE:
 - DRIVEWAY CUT
 - ASPHALT PAVEMENT
 - CONCRETE CURBS AND CURB & GUTTER
 - VEGETATED SWALE WITH UNDERDRAIN
 - GRADING FOR THE PROPOSED IMPROVEMENTS
 - STORM DRAINAGE INLET AND PIPING
 - LANDSCAPE PLANTING AND IRRIGATION
 - SITE LIGHTING AND ASSOCIATED ELECTRICAL EQUIPMENT

No.	Issue	Drawn	Approved	Date

Drawn	JSB / EER	Designer	JSB / EER
-------	-----------	----------	-----------

Drafting Check	CSM	Design Check	CSM
----------------	-----	--------------	-----

Project Manager	CSM	Date	9/3/2020
-----------------	-----	------	----------

This document shall not be used for construction unless signed and sealed for construction.

Original Size	Arch D	Bar is one inch on original size sheet
---------------	--------	--

Project No.

Title

COVER SHEET

Sheet No.

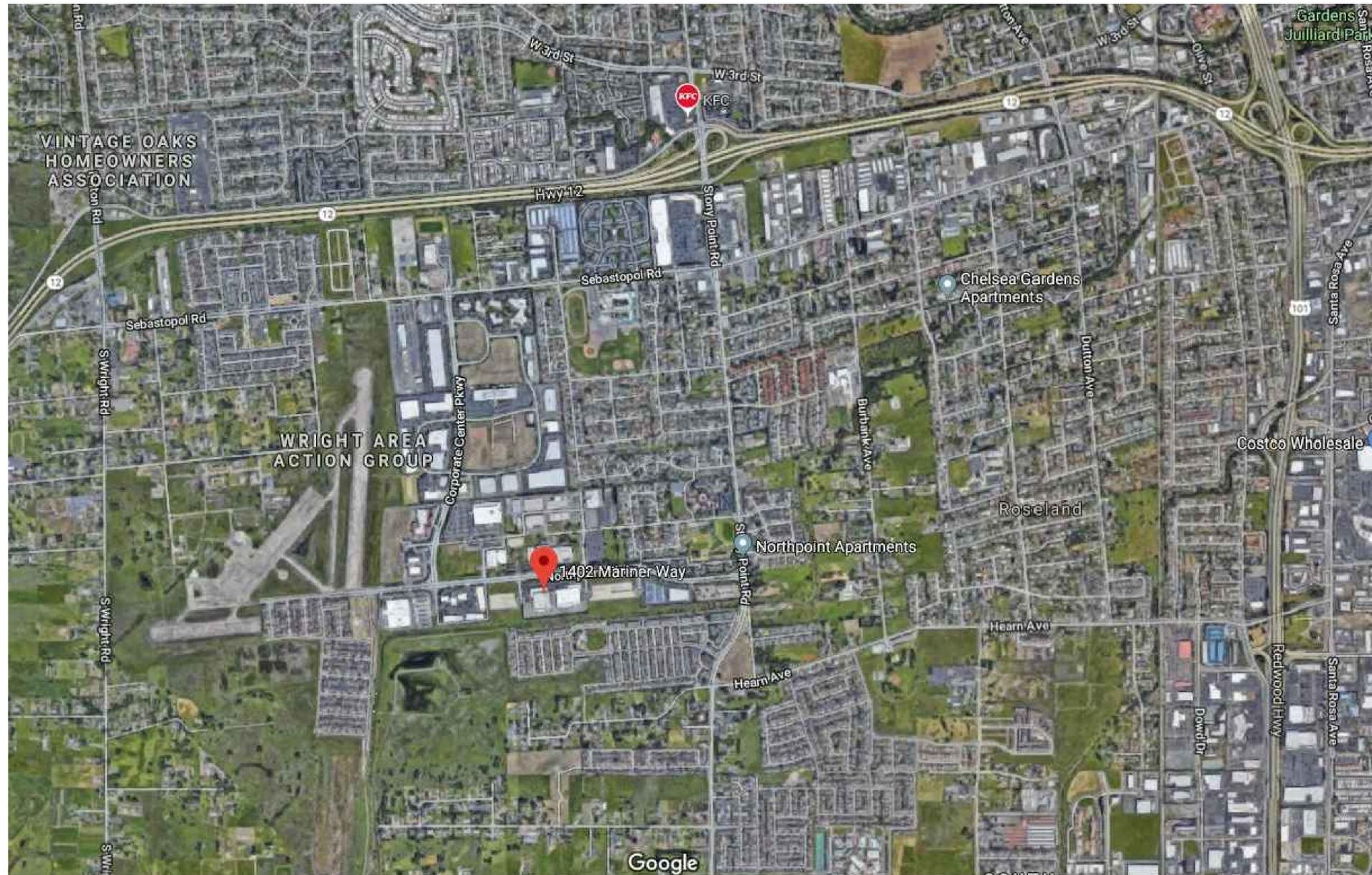
G - 001

PRELIMINARY



GHD Inc.
 943 Reserve Dr #100
 Roseville, CA 95678
 T 1 916782-8688 W www.ghd.com

Reuse of Documents
 This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2020 GHD



1 SITE LOCATION MAP - LOT B
 SCALE = NTS



Client
 VIAVI Solutions Inc.
 6001 AMERICA CENTER DRIVE, 6TH FLOOR
 SAN JOSE, CA 95002

Project
 MARINER WAY,
 PARKING LOT EXPANSION

No.	Issue	Drawn	Approved	Date
Drawn	JSB / EER	Designer	JSB / EER	
Drafting Check	CSM	Design Check	CSM	
Project Manager	CSM	Date	9/3/2020	

Original Size	Bar is one inch on original size sheet
Arch D	0 1"

Project No.

Title

SITE LOCATION MAP

Sheet No.

C-100

PRELIMINARY



GHD Inc.
 943 Reserve Dr #100
 Roseville, CA 95678
 T 916782-8688 W www.ghd.com

Reuse of Documents
 This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2020 GHD



Client
 VIAVI Solutions Inc.
 6001 AMERICA CENTER DRIVE, 6TH FLOOR
 SAN JOSE, CA 95002

Project
 MARINER WAY,
 PARKING LOT EXPANSION

No.	Issue	Drawn	Approved	Date

No.	Issue	Drawn	Approved	Date
Drawn	JSB / EER	Designer	JSB / EER	
Drafting Check	CSM	Design Check	CSM	
Project Manager	CSM	Date	9/3/2020	

This document shall not be used for construction unless signed and sealed for construction.

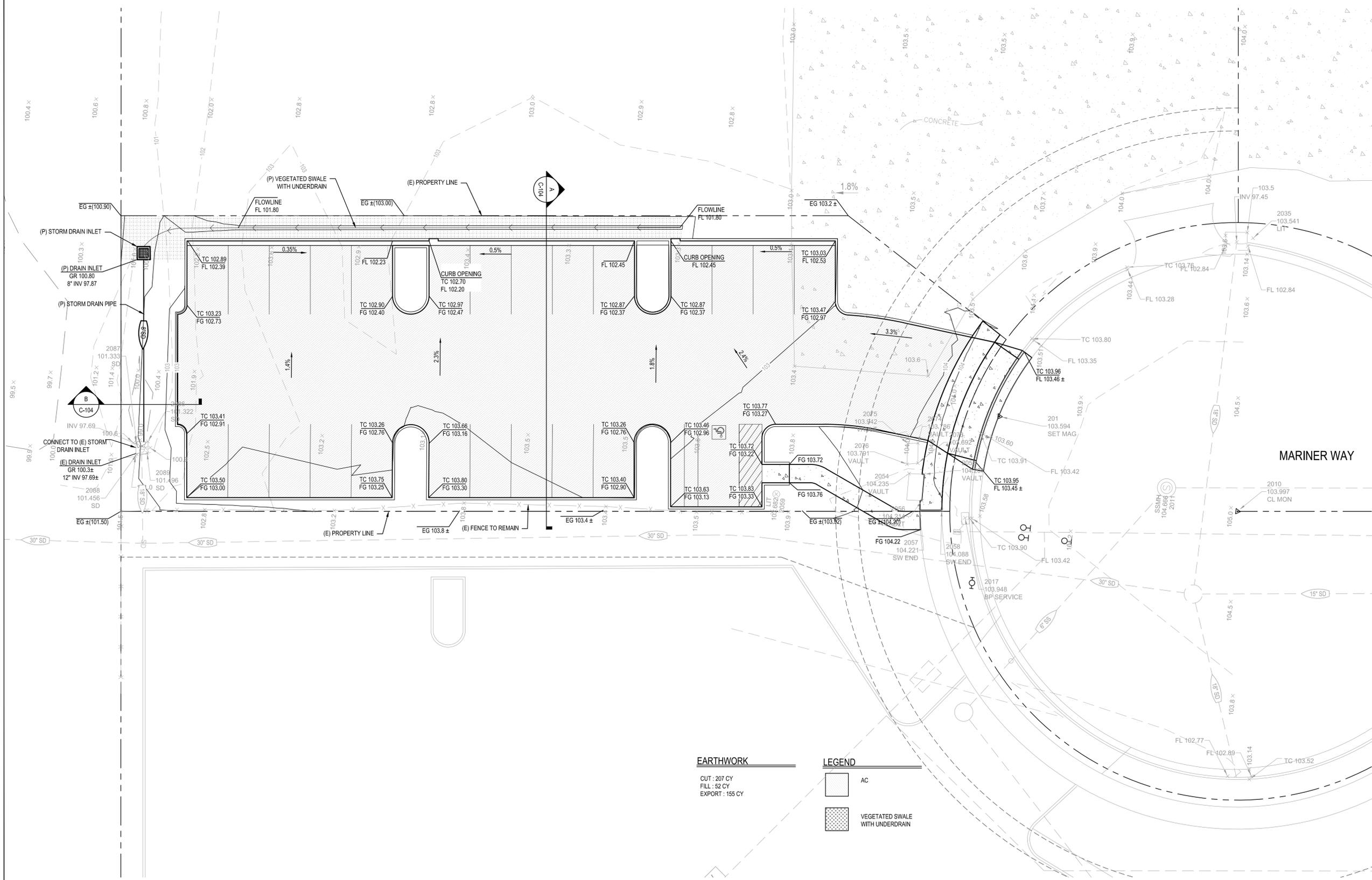
Original Size
Arch D
 Bar is one inch on original size sheet
 0 1"

Project No.
 Title

GRADING PLAN

Sheet No.
C-102

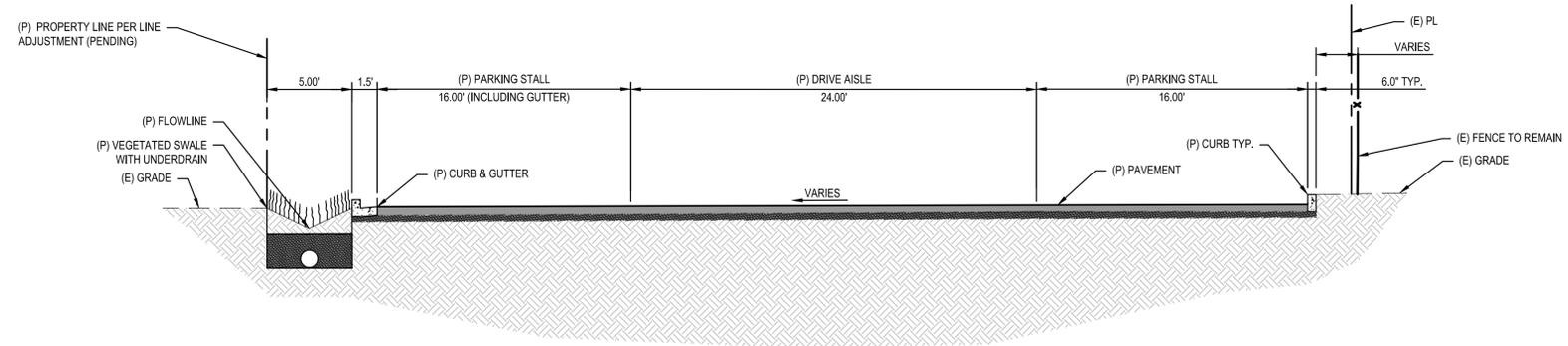
PRELIMINARY



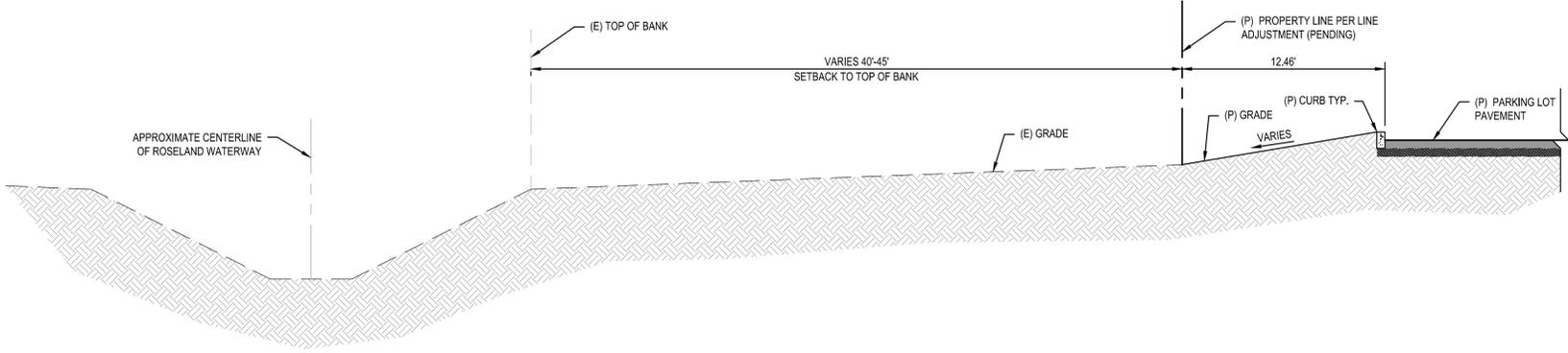


GHD Inc.
 943 Reserve Dr #100
 Roseville, CA 95678
 T 1 916782-8688 W www.ghd.com

Reuse of Documents
 This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2020 GHD



A PARKING LOT B - SECTION A
 SCALE = NTS



B PARKING LOT B - SECTION B
 SCALE = NTS



Client
 VIAMI Solutions Inc.
 6001 AMERICA CENTER DRIVE, 6TH FLOOR
 SAN JOSE, CA 95002

Project
 MARINER WAY,
 PARKING LOT EXPANSION

No.	Issue	Drawn	Approved	Date
Drawn	JSB / EER	Designer	JSB / EER	
Drafting Check	CSM	Design Check	CSM	
Project Manager	CSM	Date	9/3/2020	

This document shall not be used for construction unless signed and sealed for construction.
 Original Size
Arch D
 Bar is one inch on original size sheet
 0 1"

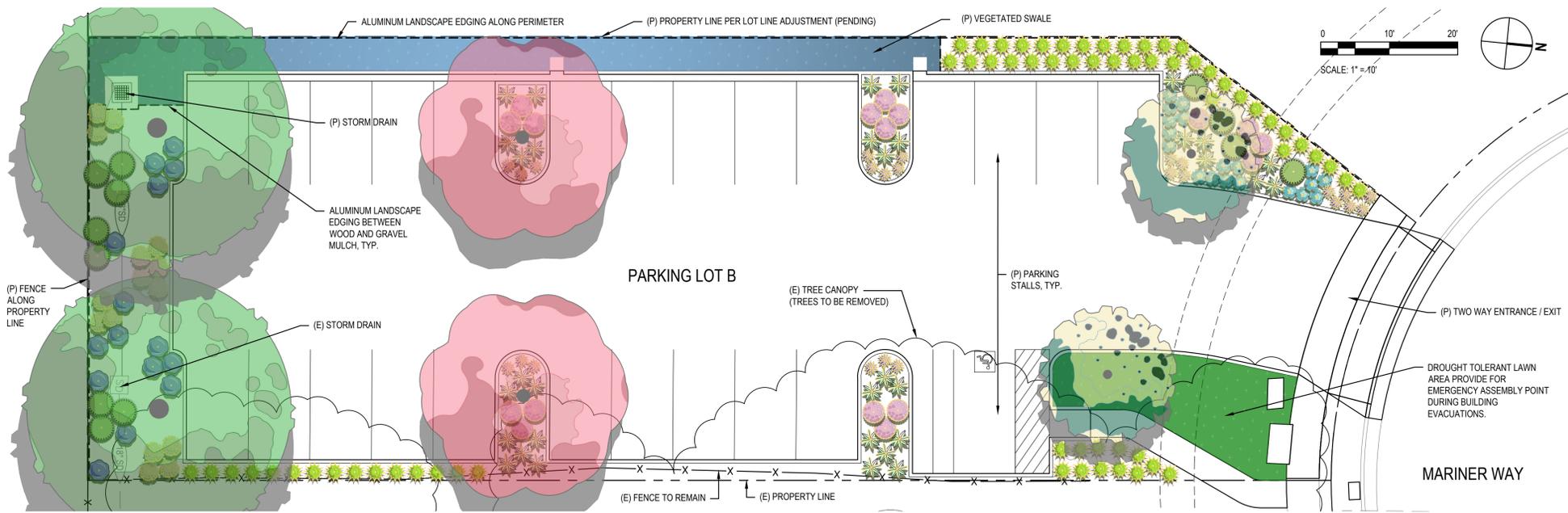
Project No.
 Title

TYPICAL SECTIONS

Sheet No.

C - 103

PRELIMINARY



LANDSCAPE DESIGN INTENT

- DESIGN SHALL MEET THE STATE AND LOCAL REQUIREMENTS ASSOCIATED WITH IRRIGATION WATER USE THROUGH THE EXCLUSIVE USE OF LOW AND MEDIUM WATER USE PLANT MATERIALS AND LOW VOLUME DRIP-LINE OR ROTARY SPRAY IRRIGATION SYSTEM.
- DESIGN IS INTENDED TO ENHANCE THE PROJECT THROUGH THE USE OF PLANT MATERIALS THAT PROVIDE YEAR ROUND TEXTURE, COLOR AND HARDINESS. NATIVES ARE USED WHERE APPROPRIATE.
- VEGETATED SWALES SHALL HAVE A 2" LAYER OF GRAVEL MULCH. COBBLE MULCH (3'-6" IN SIZE) SHALL BE PLACED AS A SINGLE LAYER AT ALL CURB CUT LOCATIONS AND AS A 1' RING AROUND ALL DRAIN INLETS TO DISPERSE FLOWS AND PREVENT INLET CLOGGING. ALL OTHER PLANTING AREAS, EXCLUDING LAWN AREAS, SHALL HAVE A 3" DEEP LAYER OF WOOD MULCH SPREAD EVENLY ACROSS ENTIRE PLANTING AREA.

DESIGN NOTES

- PLANT CONTAINER SIZES:
 - TREES TO BE PLANTED FROM 24" BOX SIZE CONTAINERS
 - SHRUBS TO BE PLANTED FROM 5-GALLON AND 1-GALLON CONTAINERS
 - GROUND COVERS TO BE PLANTED FROM 1-GALLON CONTAINERS
- ALUMINUM EDGING SHALL BE INSTALLED BETWEEN WOOD, GRAVEL MULCH, COBBLE MULCH, AND LAWN.
- SEE BELOW FOR PLANT LEGEND AND IMAGES OF PROPOSED PLANT MATERIAL.

CALGREEN-TIER 1 CHECKLIST

THE DESIGN OF THE LANDSCAPE / IRRIGATION SYSTEM IS INTENDED TO MEET THE CALGREEN-TIER 1 CHECKLIST ASSOCIATED WITH LANDSCAPE ELEMENTS. TOWARD THIS END THE PROJECT WILL INCLUDE THE FOLLOWING BEST PRACTICES:

- HYDROZONE IRRIGATION TECHNIQUES WILL BE INCORPORATED.
- THE PLANT PALETTE WILL UTILIZE AT LEAST 75% NATIVE CALIFORNIA OR DROUGHT TOLERANT PLANT MATERIALS APPROPRIATE TO THE CLIMATE ZONE REGION.
- THE USE OF POTABLE WATER WILL BE REDUCED TO A QUANTITY THAT DOES NOT EXCEED 65% OF ETO TIMES THE LANDSCAPE AREA.
- COMMON AREA AND PERIMETER AREA LANDSCAPE IRRIGATION WILL CONSIST OF A LOW VOLUME DRIP OR ROTARY SYSTEM.
- ALL IRRIGATION VALVES SHALL BE CONNECTED TO AN AUTOMATIC CONTROL SYSTEM.
- ALL IRRIGATION SYSTEMS SHALL BE DESIGNED TO MEET THE MOST CURRENT WATER CONSERVATION POLICIES AND AVAILABLE EQUIPMENT.

SANTA ROSA CITY MUNICIPAL CODE - Section 20-34.050(G.2.e) - Tree Requirement PER CITY CODE, THE DESIGN MEETS THE PARKING AREA TREE REQUIREMENTS OF ONE TREE FOR EACH FIVE PARKING SPACES (27 PARKING SPACES = 6 TREES).



Reuse of Documents
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2020 GHD

PLANT SCHEDULE MARINER WAY - LOT B

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
	LAG N40	2	Lagerstroemia indica x fauriei 'Natchez' Low Water Use (WUCOLS)	Natchez Crape Myrtle	24" Box
	PK	2	Pistacia chinensis 'Keith Davey' Low Water Use (WUCOLS)	Keith Davey Chinese Pistache	24" Box
	QUE AGR	2	Quercus agrifolia Low Water Use (WUCOLS)	Coast Live Oak	24" Box
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
	AO	24	Agapanthus orientalis 'BLUE' Medium Water Use (WUCOLS)	Blue Lily of the Nile	5 gal
	DB2	33	Dietes bicolor Low Water Use (WUCOLS)	Fortnight Lily	5 gal
	LAV ANG	19	Lavandula angustifolia 'Essence Purple' Low Water Use (WUCOLS)	English Lavender	5 gal
	LB	65	Lomandra longifolia 'Breeze' Low Water Use (WUCOLS)	Dwarf Mat Rush Breeze	1 gal
	LUP ALB	15	Lupinus albifrons Low Water Use (WUCOLS)	Bush Lupine	5 gal
	MIM AUR	15	Mimulus aurantiacus Low Water Use (WUCOLS)	Sticky Monkey Flower	5 gal
	MR	12	Muhlenbergia rigens Low Water Use (WUCOLS)	Deer Grass	5 gal
	RB	17	Rhaphiolepis indica 'Pink Dancer' Low Water Use (WUCOLS)	Pink Dancer Hawthorne	5 gal
GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
	SOD BOL	370 sf	'Bolero Plus' Turf Sod Medium Water Use	By Delta Blue Grass	Sod
	JE2	173	Juncus patens 'Elk Blue' Low Water Use (WUCOLS)	Spreading Rush	1 GAL

MULCH SCHEDULE MARINER WAY - LOT B

SYMBOL	DESCRIPTION	QTY
	Gravel Mulch	4.1 cy
	Wood Mulch	18.79 cy
	Cobble Mulch	0.46 cy

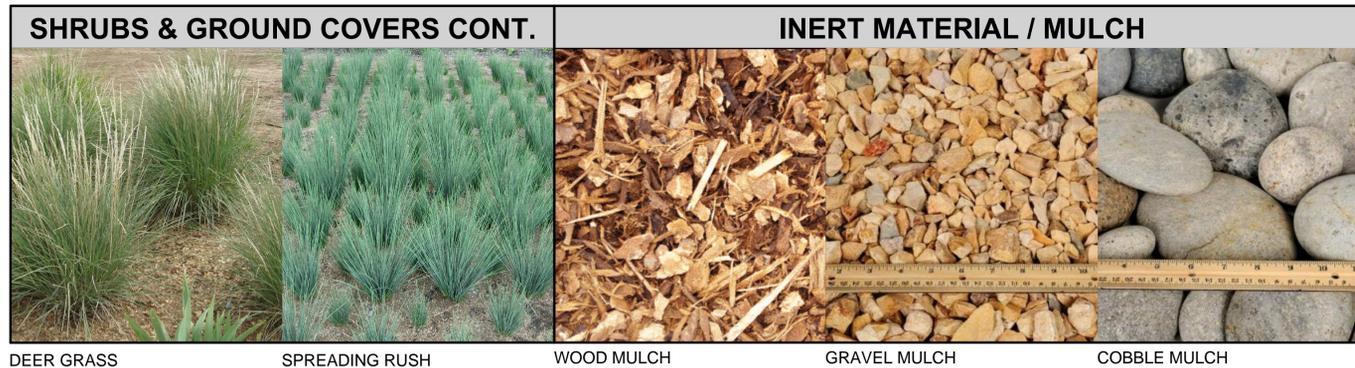


IMAGE NOTES

THESE IMAGES (COMMON NAMES INDICATED) REFLECT THE GENERAL CHARACTER OF THE PLANT MATERIALS TENTATIVELY PROPOSED ON PLANT PALETTE.



Client
VIAMI Solutions Inc.
6001 AMERICA CENTER DRIVE, 6TH FLOOR
SAN JOSE, CA 95002

Project
MARINER WAY,
PARKING LOT EXPANSION

No.	Issue	Drawn	Approved	Date

Drawn	Designer
Drafting Check	Design Check
Project Manager	Date 9/3/2020
This document shall not be used for construction unless signed and sealed for construction.	
Original Size	Scale

Arch D
Bar is one inch on original size sheet
0 1"

Project No.
Title

PRELIMINARY LANDSCAPE PLAN

Sheet No.

L - 100

PRELIMINARY

Sheet of XX



GHD Inc.
943 Reserve Dr #100
Roseville, CA 95678
T 916782-8688 W www.ghd.com

Reuse of Documents
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2020 GHD



Client
VIAVI Solutions Inc.
6001 AMERICA CENTER DRIVE, 6TH FLOOR
SAN JOSE, CA 95002

Project
MARINER WAY,
PARKING LOT EXPANSION

No.	Issue	Drawn	Approved	Date

Drawn LOL Designer CAR

Drafting CAR Design Check CAR

Project Manager CSM Date 9/3/2020

This document shall not be used for construction unless signed and sealed for construction.

Original Size Arch D Bar is one inch on original size sheet
0 1"

Project No.

Title

ELECTRICAL

SYMBOLS, NOTES

AND ABBREVIATIONS

Sheet No.

E-001

PRELIMINARY

GENERAL ELECTRICAL NOTES

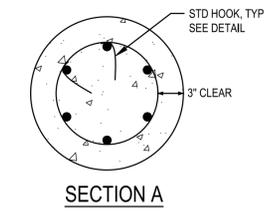
- UNLESS SPECIFICALLY INDICATED OTHERWISE, ALL EQUIPMENT INDICATED SHALL BE CONSIDERED NEW AND PROVIDED BY THE CONTRACTOR COMPLETE, INSTALLED, TESTED AND FUNCTIONING.
- CONSTRUCTION MATERIALS AND INSTALLATION SHALL MEET ALL RECOGNIZED CODES OF THE AUTHORITY HAVING JURISDICTION.
- MAINTAIN AS BUILT CONDITIONS OF THE INSTALLATION DURING CONSTRUCTION AND SUBMIT THE FINAL CONSTRUCTED CONDITIONS TO THE OWNER/ARCHITECT FOR THEIR RECORDS.
- DRAWINGS INDICATE THE REQUIRED EQUIPMENT, DEVICES, FIXTURES, ETC. AND THEIR RELATED CIRCUITING REQUIREMENTS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE DEVICE LOCATIONS WITH ALL DISCIPLINES.
- PROVIDE A TEMPORARY GENERATOR CONNECTION FOR ALL TIMES THE FIXED GENERATOR IS NOT CONNECTED. ROUTE EXHAUST OF TEMPORARY GENERATOR A MINIMUM OF 25' FROM WINDOWS OR BUILDING OPENINGS.
- COORDINATE SHUTDOWNS EXCEEDING 4 HOURS A MINIMUM OF 28 DAYS IN ADVANCE. SHUTDOWNS MAY NOT EXCEED 24 HOURS UNDER ANY CIRCUMSTANCES. COORDINATE ALL OTHER SHUTDOWNS WITH SFFD A MINIMUM OF 14 DAYS IN ADVANCE.
- ALL LIGHTING FIXTURES ARE TO BE DLC OR ENERGY STAR LABELED.

GENERAL NOTES:

- ALL CONCRETE SHALL BE NORMAL WEIGHT, WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
- ALL REINFORCING SHALL BE ASTM A615, Fy = 60 KSI. NO WELDING OF ANY REINFORCING IS PERMITTED.

DETAIL NOTES:

- POURED IN PLACE ROUND CONCRETE SUPPORT BASE.
- 6-NO. 6 VERTICAL BARS WITH NO. 3 TIES @ 12-INCH O.C. SEE NOTE 18.
- ACCESS HAND-HOLE.
- 3/4-INCH - 45° CHAMFER ALL AROUND.
- GROUT IN ALL AROUND BETWEEN BOTTOM OF POLE BASE FOLLOWING POLE ERECTION AND FINAL LEVELING.
- STUB CONDUIT UP INTO POLE BASE WIRING CAVITY. (IF RGS TERMINATE WITH GROUNDING BUSHING.)
- PROVIDE SUPPORT AND LEVELING NUTS ON TOP AND BOTTOM OF POLE BASE MOUNTING PLATE. MOUNTING PLATE AND MOUNTING BOLTS SHALL BE PER MANUFACTURERS BOLT PATTERN. LENGTH SHALL BE PER MANUFACTURERS SPECIFICATIONS. WITH 2" MIN. EMBEDMENT INTO CONCRETE POLE BASE.
- TYPICAL PVC CONDUIT, 3/4-INCH MIN. WITH CONDUCTORS AS INDICATED ON DRAWINGS. 1/2" ACCEPTABLE FOR BOLLARD FIXTURES.
- TYPICAL INCOMING EXTERIOR BRANCH CIRCUIT CONDUIT AND WIRING FROM U.G. CONDUITS.
- (1) #4 AWG BARE COPPER GROUND. COIL 30-INCH AT BOTTOM OF FOUNDATION.
- TOP OF SODDED GRADE, SIDEWALK OR ASPHALT PAVING AS INDICATED ON THE RESPECTIVE AREA SITE PLAN.
- BOLTED TYPE WIRE GROUND CONNECTOR.
- REINFORCED, PRECAST GRADE MOUNTED ELECTRICAL BOX, CHRISTY B1017 OR EQUAL. PROVIDE WITH OPEN BOTTOM. ALL SPLICES SHALL BE MADE IN THE PULL BOX AND SHALL BE WATERPROOF, CAST TYPE.
- WIRING TO LIGHT FIXTURE. CONNECT COMPLETE.
- WATERPROOF IN-LINE FUSES.
- NOT USED
- WHERE THERE ARE EXISTING POLE MOUNTED FIXTURES ON THE JOB SITE, MODIFY DIAMETER OF POLE BASE TO MATCH EXISTING. MINIMUM DIAMETER SHALL BE 18-INCH.
- LATERAL REINFORCEMENT SHALL BE DISTRIBUTED WITHIN 5-INCHES OF THE TOP OF THE COLUMN AND SHALL CONSIST OF 2-NO. 4 OR 3-NO. 3 BARS. (PER AC308-14, SECTION 10.7.6.1.6)



ELECTRICAL SYMBOLS LEGEND

CONDUIT

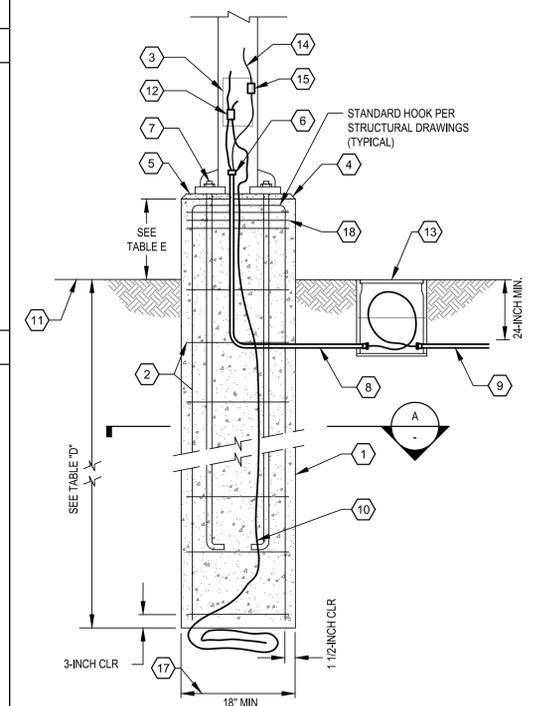
- CONDUIT INSTALLED ABOVE GRADE
- CONDUIT INSTALLED UNDERGROUND OR UNDER SLAB
- CONDUIT STUB-OUT WITH CAP
- FLEXIBLE CONDUIT WHIP TO LIGHT FIXTURE OR EQUIPMENT
- INDICATES CIRCUIT BREAKER I.D.
- CONDUIT HOME RUN TO DESIGNATED PANEL, TERMINAL, OR CONTROL CABINET
- EXAMPLES: L1-4, L1-6,8, L1-10/12
- COMMA INDICATES MULTIPLE SINGLE POLE CIRCUITS
- SLASH INDICATES MULTI-POLE CIRCUIT
- NOTE FOR CONDUIT: THE TIC MARKS INDICATE THE QUANTITY OF #12 AWG WIRES OR, IF INDICATED, THE QUANTITY OF OTHER SIZE WIRE OR CABLES.
- SEE THE SINGLE LINE DIAGRAM FOR FEEDER SIZES.
- EXAMPLES: #12 = (3) #12, #10 = (2) #10
- F1 = (1) TYPE F1 CABLE. SEE CABLE SCHEDULE.

LIGHTING

- ADJUSTABLE SPOT OR FLOOD (ARROW INDICATES AIMING)
- OUTDOOR SITE LIGHT, POLE MOUNTED LUMINAIRE ARROW INDICATES AIMING DIRECTION, IF APPLICABLE
- BOLLARD OR POST-TOP FIXTURE

EQUIPMENT

- MAIN SWITCHBOARD
- DISTRIBUTION PANEL BOARD
- COMBINATION METER/MAN SERVICE PANEL
- BRANCH CIRCUIT PANEL BOARD, SURFACE OR FLUSH MOUNTED
- LIGHTING CONTROL PANEL
- SIGNAL TERMINAL CABINET OR CONTROL PANEL SURFACE OR FLUSH MOUNTED
- SIGNAL TERMINAL BACKBOARD
- CONCRETE UNDERGROUND HAND HOLE (NUMBER DENOTES CHRISTY SIZE)
- TRANSFORMER



DESIGN ASSUMPTIONS:

THE FOUNDATION DESIGN SET FORTH IN THIS DETAIL IS BASED ON THE FOLLOWING PARAMETERS. FOUNDATION REQUIREMENTS MAY DIFFER DEPENDING ON GEOGRAPHIC LOCATION, LUMINAIRE SIZE AND CONFIGURATION, POLE SIZE AND CONFIGURATION AS WELL AS SOIL CONDITIONS. THE DESIGN PROFESSIONAL SHALL VERIFY THAT THE FOUNDATION DESIGN PROVIDED MEETS OR EXCEEDS THAT REQUIRED FOR THE PROJECT IN WHICH THIS DETAIL IS BEING USED. THIS DESIGN ASSUMES THAT WIND LOAD GOVERNS OVER SEISMIC LOADING FOR THE LIGHT POLE FOUNDATION DESIGN.

DESIGN CODES: 2016 CALIFORNIA BUILDING CODE (2016 CBC) USING ASCE 7-10, CHAPTER 29, FOR WIND LOADS AND THE POLE FOUNDATION FORMULAS AS SET FORTH IN 2016 CBC SECTION 1807.3.2.

EFFECTIVE PROJECTED AREA (EPA):
LUMINAIRE: 5-FT²
POLE: 0.5-FT x POLE HEIGHT
BOLLARD BASE: 2-FT²

RISK CATEGORY: II
BASIC WIND SPEED: 110 MPH
DIRECTIONALITY FACTOR 'K_d': 0.95
EXPOSURE CATEGORY: C
TOPOGRAPHIC FACTOR 'K_z': 1.0
GUST EFFECT FACTOR 'G': 0.85

VELOCITY PRESSURE COEFFICIENT 'K_z':
0 FT - 15 FT: 0.85
15 FT - 20 FT: 0.90
20 FT - 25 FT: 0.94
25 FT - 30 FT: 0.98
30 FT - 35 FT: 1.01

VELOCITY PRESSURE: FORCE COEFFICIENT 'C':
0 FT - 15 FT: 0.64
15 FT - 25 FT: 0.70
25 FT - 35 FT: 0.86

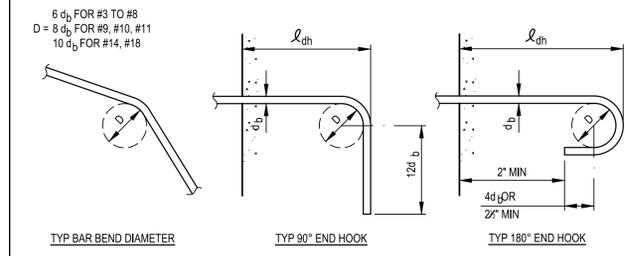
WIND FORCE: F = q_sGC_fA_f

SOIL TYPE: CLAY SOIL PER TABLE 1806.2

POLE LOCATION	BASE HEIGHT ABOVE FINISHED GRADE
PARKING LOT	36"
PRIVATE DRIVE	36"
LANDSCAPE AREAS	4" ABOVE GRADE

POLE HEIGHT	POLE BASE DEPTH (H)		
	CONSTRAINED*	NON-CONSTRAINED	MIN DIAMETER
0 FT - 4 FT (BOLLARD)	18-INCH	24-INCH	12-INCH
4 FT - 15 FT	39-INCH	52-INCH	18-INCH
15 FT - 25 FT	54-INCH	72-INCH	18-INCH
25 FT - 35 FT	66-INCH	87-INCH	18-INCH
35 FT+	REQUIRES STRUCTURAL DESIGN		

*LATERAL CONSTRAINT IS PROVIDED AT THE GROUND SURFACE SUCH AS BY A RIGID FLOOR OR CONCRETE PAVEMENT OR ASPHALT PAVEMENT.



BAR SIZE	NORMAL WEIGHT CONCRETE, f _c PSI			
	3000	4000	5000	6000
#3	6	6	6	6
#4	6	7	6	6
#5	10	9	8	7
#6	12	10	9	9
#7	14	12	11	10
#8	16	14	12	11
#9	18	15	14	13
#10	20	17	16	14
#11	22	19	17	16
#14	38	33	29	27
#18	50	43	39	35

REINFORCING BAR ENDS AND END HOOKS

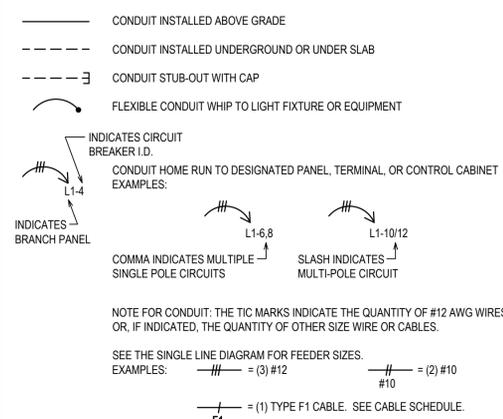
1 TYPICAL CONCRETE POLE OR BOLLARD BASE

NO SCALE

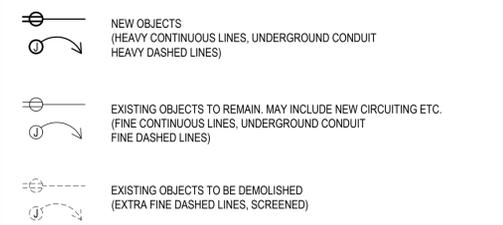
ABBREVIATIONS

- (D) DEMOLISH
- (E) EXISTING
- (F) FUTURE
- (N) NEW
- A AMPERES
- AC ALTERNATING CURRENT
- AF AMP FRAME
- AFF ABOVE FINISHED FLOOR
- AFG ABOVE FINISHED GRADE
- AHU AIR HANDLING UNIT
- AIC AMPS INTERRUPTING CAPACITY
- ANN ANNUNCIATOR
- ATS AUTOMATIC TRANSFER SWITCH
- AWG AMERICAN WIRE GAUGE
- BAT BATTERY
- BFG BELOW FINISH GRADE
- CATV CABLE TELEVISION
- C CONDUIT
- CB CIRCUIT BREAKER
- CCTV CLOSED CIRCUIT TELEVISION
- CO CONDUIT ONLY
- CPT CONTROL POWER TRANSFORMER
- CT CURRENT TRANSFORMER
- CU COPPER
- DC DIRECT CURRENT
- EF EXHAUST FAN
- EGU ENGINE GENERATOR UNIT
- EM EMERGENCY
- EMT ELECTRICAL METALLIC TUBING
- ENT ELECTRICAL NON-METALLIC TUBING
- EP EXPLOSION PROOF
- FA FIRE ALARM
- FACP FIRE ALARM CONTROL PANEL
- FC FOOT CANDLE
- FU FUSE
- GND GROUND
- GFCI GROUND FAULT CIRCUIT INTERRUPTER
- GFI GROUND FAULT INTERRUPTER
- GFR GROUND FAULT RELAY
- HID HIGH INTENSITY DISCHARGE
- HOA 'HAND-OFF-AUTO' SWITCH
- HP HORSEPOWER
- HPS HIGH PRESSURE SODIUM
- HVAC HEATING, VENTILATION & AIR-CONDITIONING
- IG ISOLATED GROUND
- JB JUNCTION BOX
- KAIC KILO-AMPS INTERRUPTING CAPACITY
- KV KILOVOLT
- KVA KILOVOLT-AMP
- KW KILOWATT
- KWH KILOWATT-HOUR
- LPS LOW PRESSURE SODIUM
- LV LOW VOLTAGE
- MCB MAIN CIRCUIT BREAKER
- MCC MOTOR CONTROL CENTER
- MCP MOTOR CIRCUIT PROTECTOR
- MFR MANUFACTURER
- MH METAL HALIDE
- MLO MAIN LUGS ONLY
- MV MEDIUM VOLTAGE
- NIC NOT IN CONTRACT
- NL NIGHT LIGHT
- NTS NOT TO SCALE
- OC ON CENTER
- PA PUBLIC ADDRESS
- PT POTENTIAL TRANSFORMER
- PVC POLYVINYL CHLORIDE
- PB PULL BOX, ELECTRICAL
- RECP RECEPACLE, OUTLET
- RGS RIGID GALVANIZED STEEL (CONDUIT)
- RVSS REDUCED VOLTAGE SOFT START
- RTU REMOTE TERMINAL UNIT
- TV TELEVISION MONITOR (SET)
- TVSS TRANS. VOLT. SURGE SUPPRESSOR
- UF UNDER FLOOR
- UG UNDERGROUND
- UON UNLESS OTHERWISE NOTED
- UPS UNINTERRUPTIBLE POWER SUPPLY
- V VOLT
- VA VOLT-AMP
- VFD VARIABLE FREQUENCY DRIVE
- WP WEATHERPROOF
- WPI WEATHERPROOF IN USE
- XFMR TRANSFORMER

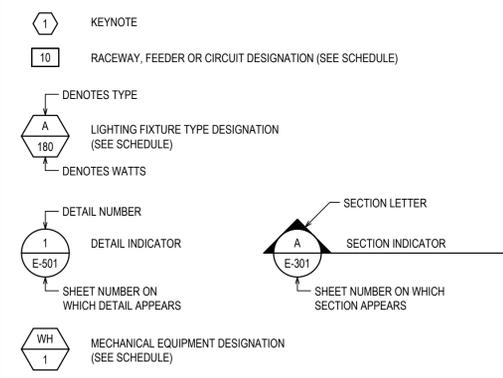
CONDUIT



OBJECT LINES



ANNOTATION



SHEET INDEX

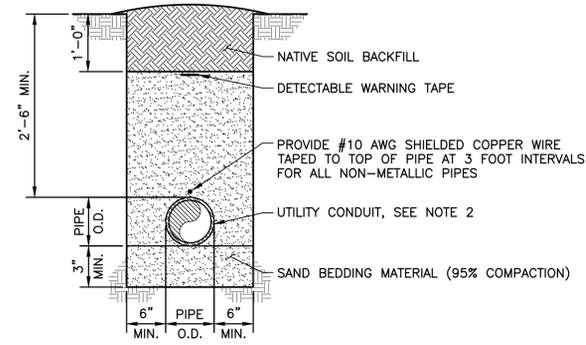
SHEET NUMBER	SHEET TITLE
E-001	SYMBOLS, NOTES AND ABBREVIATIONS
E-101	SITE PLAN LOT-C
E-701	PHOTOMETRICS LOT-C

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MANUFACTURER	MODEL	LAMP TYPE	COLOR TEMP	BALLAST/DRIVER	FIXTURE LUMENS	FIXTURE WATTS	MOUNTING	NOTES
A	POLE LIGHT	KIM LIGHTING	ALT1-28L-60-3K7-2-UNV-ASQ-DB-NXSP30F-BC	LED	3000K	DIMMABLE ELECTRONIC DRIVER	7,500	60	POLE	PROVIDE 5" ROUND STRAIGHT STEEL OR ALUMINIUM POLE, 21-FT.

NOTE: REFER TO SPEC SECTION 26 09 23 FOR LIGHTING CONTROL SEQUENCE OF OPERATIONS

PRELIMINARY

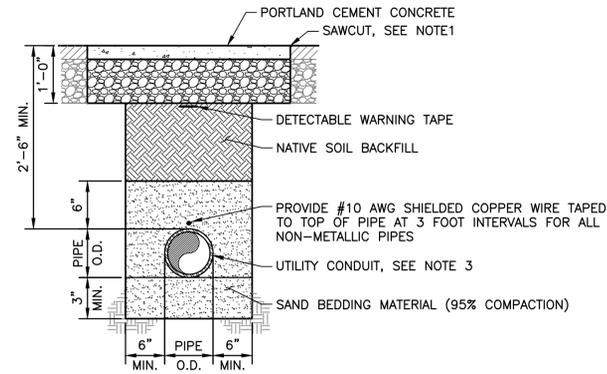


NOTES:

- FOR TRENCH DEPTHS GREATER THAN 6.5 FEET, ONLY TOP 5-FEET OF TRENCH SHALL BE 95% COMPACTED SELECT SAND BACKFILL. THE REMAINDER SHALL BE 90% COMPACTED SAND BACKFILL.
- SEE ELECTRICAL SHEETS FOR CONDUITS AND DUCT BANK TRENCH BEDDING DETAIL.

1 UN-PAVED FINISH UTILITY TRENCH

NOT TO SCALE



NOTES:

- WHERE EXISTING PAVEMENT IS PORTLAND CEMENT CONCRETE, TRENCH SAWCUT WILL BE WITHIN 30° OF EXISTING CONCRETE JOINT, REMOVE AND REPLACE CONCRETE TO JOINT. MATCH EXISTING FINISH, REINFORCEMENT, AND THICKNESS (MINIMUM THICKNESS 4"). SEE DETAIL 4/C5.1.
- FOR TRENCH DEPTHS GREATER THAN 6.5 FEET, ONLY TOP 5-FEET OF TRENCH SHALL BE 95% COMPACTED SELECT SAND BACKFILL. THE REMAINDER SHALL BE 90% COMPACTED SAND BACKFILL.
- SEE ELECTRICAL SHEETS FOR CONDUITS AND DUCT BANK TRENCH BEDDING DETAIL.

2 CONCRETE FINISH UTILITY TRENCH

NOT TO SCALE

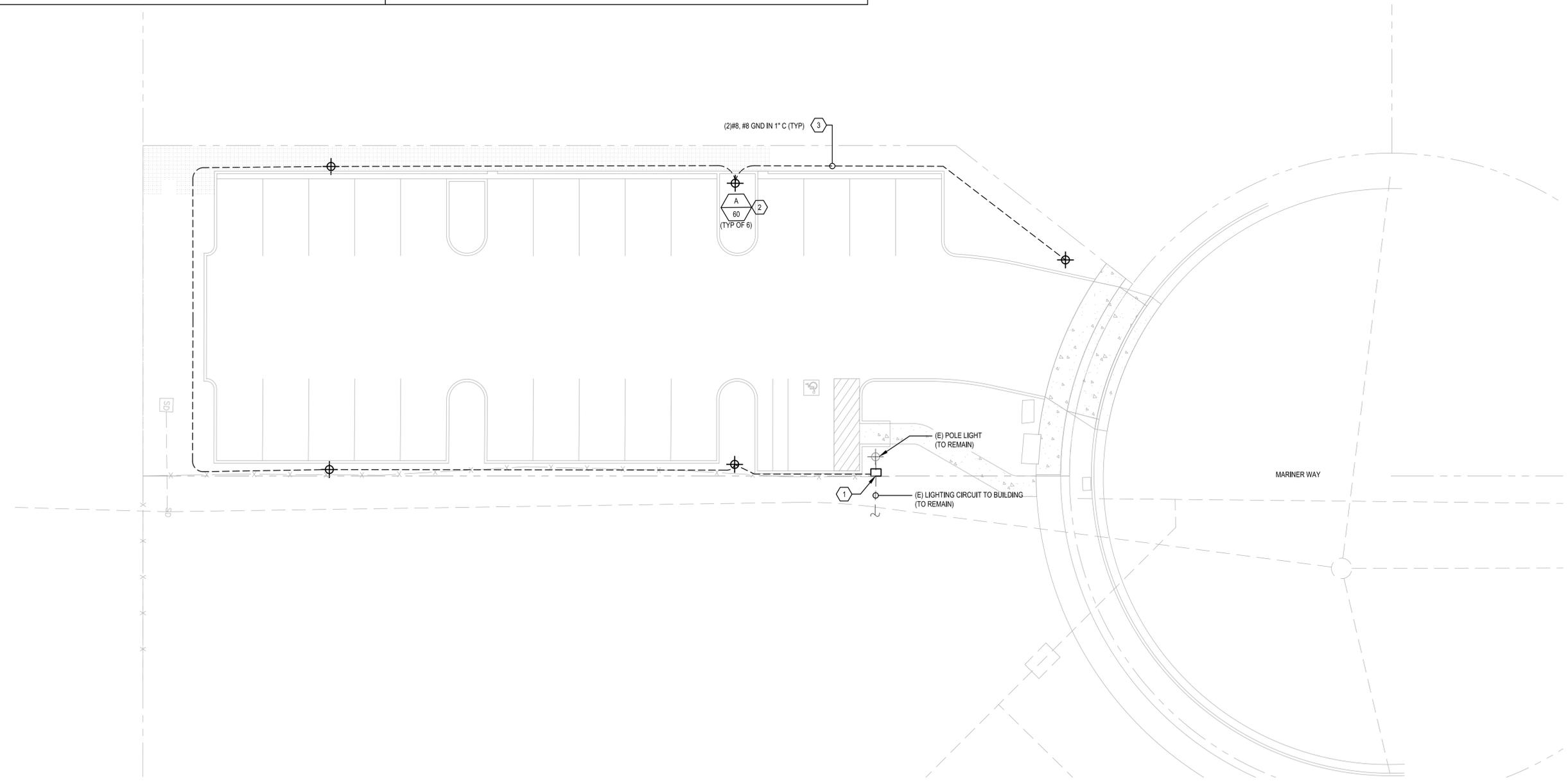
SHEET KEYNOTES

- PROVIDE PULLBOX, CHRISTY B1017 WITH BASE AND COVER OR EQUAL. INTERCEPT (E) LIGHTING POWER CONDUIT.
- PROVIDE AREA LIGHT FIXTURE COMPLETE WITH POLE, CONCRETE POLE BASE, AND MOUNTING ACCESSORIES AS REQUIRED.
- PROVIDE LIGHTING FEEDER AS INDICATED AND EXTEND LIGHTING POWER CIRCUIT TO AREA LIGHTINGS.



GHD Inc.
943 Reserve Dr #100
Roseville, CA 95678
T 1 916782-8688 W www.ghd.com

Reuse of Documents
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2020 GHD



Client
VIAVI Solutions Inc.
6001 AMERICA CENTER DRIVE, 6TH FLOOR
SAN JOSE, CA 95002

Project
MARINER WAY,
PARKING LOT EXPANSION

No.	Issue	Drawn	Approved	Date

Drawn	LOL	Designer	CAR
-------	-----	----------	-----

Drafting Check	CAR	Design Check	CAR
----------------	-----	--------------	-----

Project Manager	CSM	Date	9/3/2020
-----------------	-----	------	----------

This document shall not be used for construction unless signed and sealed for construction.

Original Size	Arch D	Bar is one inch on original size sheet
		0 1"

Project No.

Title

**SITE PLAN
LOT -B**

Sheet No.

E-101

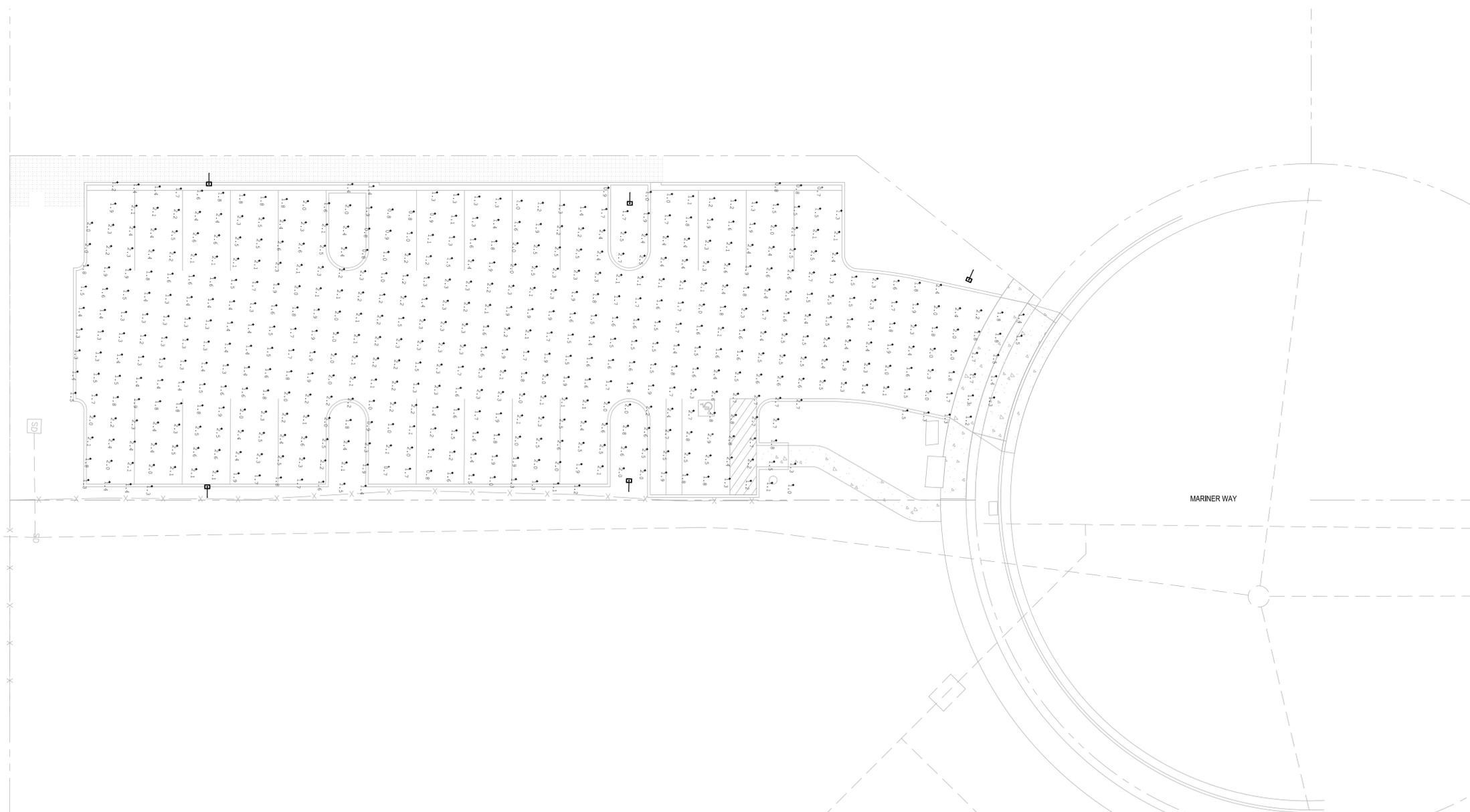
PRELIMINARY



GHD Inc.
 943 Reserve Dr #100
 Roseville, CA 95678
 T 916782-8688 W www.ghd.com

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Mariner LOT-B	Illuminance	Fc	1.89	2.9	0.7	2.70	4.14

Reuse of Documents
 This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of GHD and shall not be reused in whole or in part for any other project without GHD's written authorization. © 2020 GHD



Client
VIAVI Solutions Inc.
 6001 AMERICA CENTER DRIVE, 6TH FLOOR
 SAN JOSE, CA 95002

Project
**MARINER WAY,
 PARKING LOT EXPANSION**

No.	Issue	Drawn	Approved	Date

Drawn	LOL	Designer	CAR
-------	-----	----------	-----

Drafting Check	CAR	Design Check	CAR
----------------	-----	--------------	-----

Project Manager	CSM	Date	9/3/2020
-----------------	-----	------	----------

This document shall not be used for construction unless signed and sealed for construction.

Original Size	Arch D	Bar is one inch on original size sheet
		0 1"

Project No.

Title

PHOTOMETRICS LOT -B

Sheet No.

E-701

PRELIMINARY